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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,174	02/26/2004	Hermann Haaga	029384.53187US	9143
23911	7590	05/12/2006	EXAMINER	
CROWELL & MORING LLP INTELLECTUAL PROPERTY GROUP P.O. BOX 14300 WASHINGTON, DC 20044-4300			BALSIS, SHAY L	
			ART UNIT	PAPER NUMBER
			1744	

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/786,174	HAAGA, HERMANN	
	Examiner	Art Unit	
	Shay L. Balsis	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/26/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 13 and 16 all include the limitation of a “separation element” however, it is unclear what the separation element is. The terminology is not defined or disclosed in the specification. The examiner believes that the separation element is another term for the free-wheel coupling. Applicant must clarify the claim language.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 7-8, 10, 12-13, 15 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Haaga (USPN 5896611).

With regards to claims 1, 17, 20 and 21, Haaga teaches a hand-operated sweeping machine having two circular brooms (11, 12) that are mounted in the front area of the sweeping machine. The brooms are driven to rotate in opposite directions with a motor drive (col. 7, lines 13-22), wherein in addition to the motor drive for the brooms there is also a driving means to

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transfer driving forces derived from forward motion of the sweeping machine to the circular brooms (col. 5, lines 22-54) and means for automatically interrupting a connection between the motor drive and the driving means (a power switch for turning the power on and off).

With regards to claims 3 and 18, there is an overriding coupling which allows the brooms to run ahead of the driving means and is situated between the driving means and the brooms (col. 5, lines 59-67 and col. 6, lines 1-13).

With regards to claims 5 and 7, given that a motor drive can be used in addition to the driving mean and an overriding coupling already exists between the driving means and the broom, it can be rationalized that an overriding coupling would also be located between the brooms and motor drive.

With regards to claims 8, 10 and 12 the overriding coupling is designed as a freewheeling coupling (col. 5, lines 66-67, col. 6, lines 1-3).

With regards to claims 13 and 15, the means for interrupting a drive connection between the circular brooms and the motor drive include a separation element, which responds when the broom is turning more rapidly than the motor drive (col. 6, lines 3-13).

With regards to claim 19, the means for interruption are held electrically in an engaged position so that the brooms are not allowed to rotate in opposite directions. Thus the brooms are engaged to only rotate in one direction and the interruption mechanism prevents the brooms from spinning in an opposite direction.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4, 6, 9, 11, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haaga ('611).

Haaga teaches all the essential elements of the claimed invention as stated above, however fails to teach that there are separate motors provided for each broom (claim 2). The specification teaches separate drive means for each broom (col. 5, lines 22-54) and teaches using a motor to drive the brooms (col. 7, lines 13-22) however it is unclear if each broom has a separate motor. It would have been obvious to modify Haaga so that each broom has a separate motor since duplicating parts for a multiple effect is a modification that has been considered to be within the level of ordinary skill in the art. *In re Harza* 124 USPQ 378, 380. Additionally, having a separate motor for each broom would allow the user to adjust the speed of each broom individually, so that they can rotate at different speeds or so that one can operate by the motor and the other could operate by the driving means.

Claims 1-2, 17, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kress (PGPub 2003/0028982) in view of Yacobi (USPN 6918155).

With regards to claims 1, 17, 20 and 21, Kress teaches a hand-operated sweeping machine having two circular brooms (14 figure 3, shows two broom next to each other) that are mounted in the front area of the sweeping machine. There is a motor drive and additionally a

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driving means to transfer driving forces derived from forward motion of the sweeping machine to the circular brooms ([0007]) and means for automatically interrupting a connection between the motor drive and the driving means (a power switch for turning the power on and off).

With regards to claim 19, the means for interruption are held electrically in an engaged position so that the brooms are not allowed to rotate in opposite directions. Thus the brooms are engaged to only rotate in one direction and the interruption mechanism prevents the brooms from spinning in an opposite direction.

Kress teaches all the essential elements of the claimed invention however fails to teach that the brooms rotate in opposite directions (claims 1, 17, 20 and 21) and that there are separate motors for each broom (claim 2). Yacobi teaches a sweeping machine comprising two brooms each rotating in opposite directions. This eliminated any tendency of the brooms to push or pull the floor cleaning apparatus across the floor during operation. Thus the apparatus is easier to manipulate and move where the operator desires (col. 4, lines 35-43). It would have been obvious to modify Kress so that the brooms rotate in opposite directions as taught by Yacobi so that the sweeping machine is easier to manipulate.

Additionally, with regards to claim 2, it would have been obvious to modify Kress so that each broom has a separate motor since duplicating parts for a multiple effect is a modification that has been considered to be within the level of ordinary skill in the art. *In re Harza* 124 USPQ 378, 380. Additionally, having a separate motor for each broom would allow the user to adjust the speed of each broom individually, so that they can rotate at different speeds or so that one can operate by the motor and the other could operate by the driving means.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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5/3/06



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